AvediaServer Modules

VoD, Scheduled Play,Record, EPG and Portal

AvediaServer Administrator's Guide

exterity building IPTV

Notices

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Products Covered By This Guide

- AvediaServer™

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Safety Notices

Before installing and operating these products, please read the safety information in this manual.

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Important Safety Instructions

Read all of these instructions thoroughly before proceeding with installation.

There are no instructions specifically for service personnel in this document. There are no user serviceable parts inside any Exterity product. To prevent electric shock or fire hazard, do not remove cover. Refer service to qualified service personnel.

This chapter contains important safety information. If you are unsure about any of the information in the section, please contact Exterity.

USA and Canada

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the instructions contained in this manual.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
16. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle.
17. The mains plug of the power supply cord shall remain readily operable.

WARNING! To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

EU and Others

Do not proceed beyond a **WARNING!** notice until you have understood the hazardous conditions and have taken appropriate steps.

Safety Information

WARNING! There are no user serviceable parts inside any Exterity product. To prevent electric shock or fire hazard, do not remove cover. Refer service to qualified service personnel.

WARNING! For 230/240 volt operation, be sure to use a harmonised grounded 3 conductor cord, rated 6 Amp minimum. Use a suitable cord for connection to the equipment and terminating in an IEC approved plug.

This equipment relies upon a safety earth for operation, ensure that you always use a power cord with appropriate earth and that the inlet to which is inserted also has the appropriate earth. If in any doubt about the earth provision in your building consult a qualified electrician

WARNING! Use only the dedicated power supply or cord supplied for your device.

WARNING! The Exterity products use ventilation holes for cooling. None of the ventilation holes should be blocked. Keep all materials at least 5cm away from all the ventilation holes.

WARNING! Do not expose the product to any rain or moisture.

WARNING! Do not use the product near a naked flame e.g. a candle.

WARNING! The operating conditions of the product should be 0°C-35°C with a Relative Humidity of 5 – 95%. The product should not be operated outside of these conditions.

There are no user-serviceable parts inside these products. Any servicing, adjustment, maintenance, or repair must only be performed by service-trained personnel.

About this Manual

Summary

This manual explains how to manage basic functions of the Exterity AvediaServer product family, including installing, configuring and operating the AvediaServer.

Scope

This edition of the manual refers to version 3.0.1 of the AvediaServer platform.

Audience

This manual is intended for use by systems integrators or systems administrators who are installing and setting up Exterity products.

It is assumed that readers are familiar with installing and configuring network-based products. Ideally, readers will also have an understanding of the key features of an IPTV system.

Associated Documentation

We strongly recommend that you read the *AvediaServer Install Guide* for more information on how to physically install the AvediaServer.

Additionally, the following guides provide specific information relevant to the AvediaServer modules available:

Manual	Reference Number
AvediaServer Play Module Administrator's Guide	1300-0017-0001
AvediaServer Portal Module Administrator's Guide	1300-0021-0001
AvediaServer Record Module Administrator's Guide	1300-0014-0001
AvediaServer EPG Module Administrator's Guide	1300-0015-0001
Exterity SD Receiver Administrator's Guide	1300-0004-0001
Exterity HD Receiver Administrator's Guide	1300-0012-0001
Exterity IPTV Manager Administrator's Guide	1300-0011-0001
Supermicro SuperServer 6025B-3/6025B-3R User's Manual	1.0c

Table 1 Associated Documentation

Copyright

The Exterity AvediaServer is a powerful product that allows you to import (copy) content (audio & video) and subsequently distribute that content to large numbers of users over an IP network. Content may have a copyright and you should always secure the permission of the copyright holder in order to copy and transmit the content on your IP network.

Unauthorised use and/or duplication of copyrighted material may be a violation of copyright law in one or many countries/regions. In using the AvediaServer you accept full responsibility for the copyright status of the content you import and transmit on your IP network.

Terms and Definitions

The following terms and definitions are used in this document:

DHCP	Dynamic Host Configuration Protocol
EIT	Event Information Table
EPG	Electronic Program Guide
FTP	File Transfer Protocol
IGMP	Internet Group Management Protocol
NTP	Network Time Protocol
RTSP	Real Time Streaming Protocol
SAP	Session Announcement Protocol
SNMP	Simple Network Management Protocol
SSH	Secure Shell
Syslog	a protocol for forwarding log messages in an IP network
TFTP	Trivial File Transfer Protocol
VoD	Video on Demand
XML	Extensible Markup Language

Table 2 Terms and Definitions

1 About AvediaServer

The AvediaServer is a server platform which can be supplied with a range of different modules selected from:

- Play – including VoD and Scheduled Play
- Record
- Electronic Program Guide (EPG)
- Portal

Valid module combinations are shown the table below:

Name	Model	Play	Record	EPG	Portal
Portal	m6010			✓	✓
Play 60	m6110	✓		✓	✓
Play 200	m6120	✓		✓	✓
Play 500	m6150	✓			
Record 200	m6220		✓		

Table 3 AvediaServer Model Configurations

Warning! The AvediaServer should be powered down or rebooted using the Web Management Interface. Powering off an AvediaServer without using the Web Management Interface may corrupt the software, which may then require a re-install or, at worst, a return to the factory.

Hardware

The C1550 chassis is a 2U high server.

For more information, see **Viewing Hardware Information** on page **21**.

2 Getting Started

This section provides an overview of the steps required to get the AvediaServer up and running.

Racking the Server

First, you need to install the server into a rack.

For more information on racking the server follow the manufacturer's instructions on the specific server model supplied. The installation manual is included with the AvediaServer.

Note: Due to its size and weight, the AvediaServer needs to be handled with care to ensure no injury.

Connecting to the Network

For more information on connecting the AvediaServer to the network, see the *AvediaServer Install Guide*.

Note: The AvediaServer has two Ethernet interfaces, labelled port 1 and port 2; use **port 1**, which is on the left when looking at the rear of the unit.

Inserting the Dongle

The USB dongle is pre-programmed by Exterity and must be inserted into the chassis for the correct operation of the AvediaServer. The dongle is essential to get the AvediaServer up and running and loads the modules and services specific to the configuration model of your AvediaServer. Each module supplies one or more services. For more information on the different AvediaServer configuration models available, see Table 3 on page 9. For instructions on inserting the dongle into the chassis, see the *AvediaServer Install Guide*.

The dongle is discovered by the AvediaServer and the correct modules and services are automatically added and displayed on the **Status** page of the AvediaServer's Web Management Interface. For more information, see **Status Monitoring** on page **19**.

Connecting to Power

For more information on powering up the AvediaServer, see the *AvediaServer Install Guide*.

Configuring the IP Address

By default, the AvediaServer requires a DHCP Server to be available on the network to assign it an IP address. Allocating a static IP address for the AvediaServer allows continued operation without a DHCP Server.

Exterity **strongly** recommends using a static IP address for an AvediaServer because other Exterity devices will rely on this address remaining the same.

To assign a static IP address to the AvediaServer, temporarily set up a DHCP server on an isolated network. Once an IP address is assigned to the AvediaServer, you can configure a static IP address using the Web Management Interface.

For more information, see **Configuring IP address settings** on page **16**.

For hints on how to find out which IP address has been assigned to a server using DHCP, **APPENDIX A Serial Interface Connection** on page **33**.

Configuring the Name and Location of the AvediaServer

Now you need to give the AvediaServer a name and location. By default, the name assigned to the AvediaServer is the MAC address.

For more information, see **Naming the AvediaServer** on **15**.

Configuring AvediaServer Modules

To configure the individual modules supplied with AvediaServer, see the relevant module guides listed in **Associated Documentation** on page **7**.

3 Management Interfaces

The AvediaServer has three management interfaces as follows:

- IPTV Manager
- Web Management Interface
- Admin Interface

IPTV Manager

The IPTV Manager is a Windows application which discovers Exterity devices on the network and uses SNMP to manage a subset of server functionality.

The IPTV Manager can also be used to start the server's Web Management Interface, as shown below:

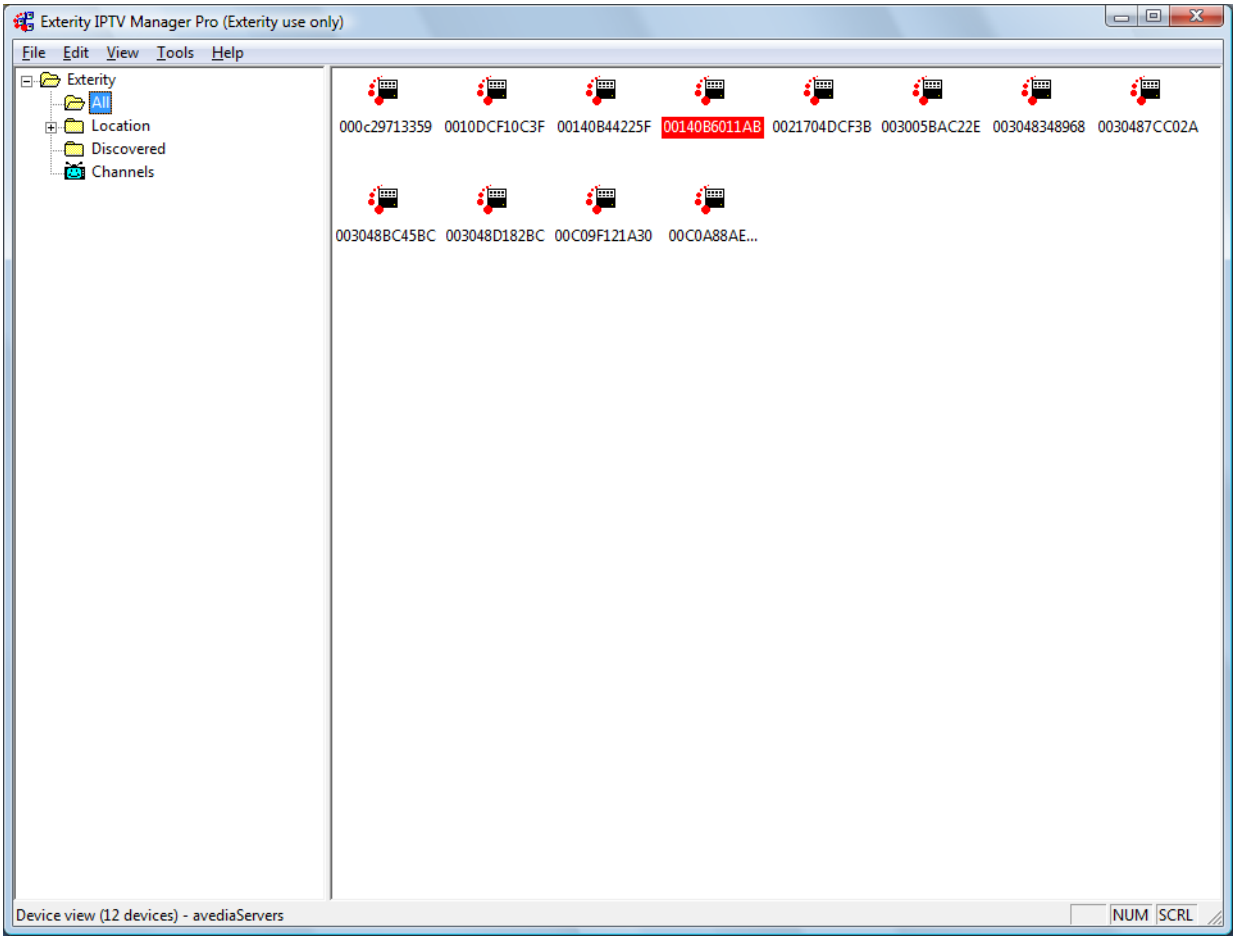


Figure 1 Exterity IPTV Manager

Note: You can also use a third-party SNMP tool to manage the server. Contact Exterity to obtain the Management Information Base (MIB).

For more information on using the IPTV Manager, see the *Exterity IPTV Manager Administrator's Guide*.

Web Management Interface

You can manage every aspect of AvediaServer functionality using the Web Management Interface.

The Web Management Interface supports the following web browsers: Microsoft Internet Explorer 7 & 8 and Mozilla Firefox 2 &3.

You can display the Web Management Interface using the IPTV Manager, as shown in the previous section, or by typing the IP address of the server directly into your browser:

Open the Web Management Interface as follows:

1. When prompted, enter the correct username and password. The default login details are:

   Username: `admin`
   Password: `labrador`

Note: The administrator can change the admin password using the Web Management Interface. For more information, see **Changing the Admin Password** on page **16**.

---

2. The Web Management Interface opens in your browser, as shown below:

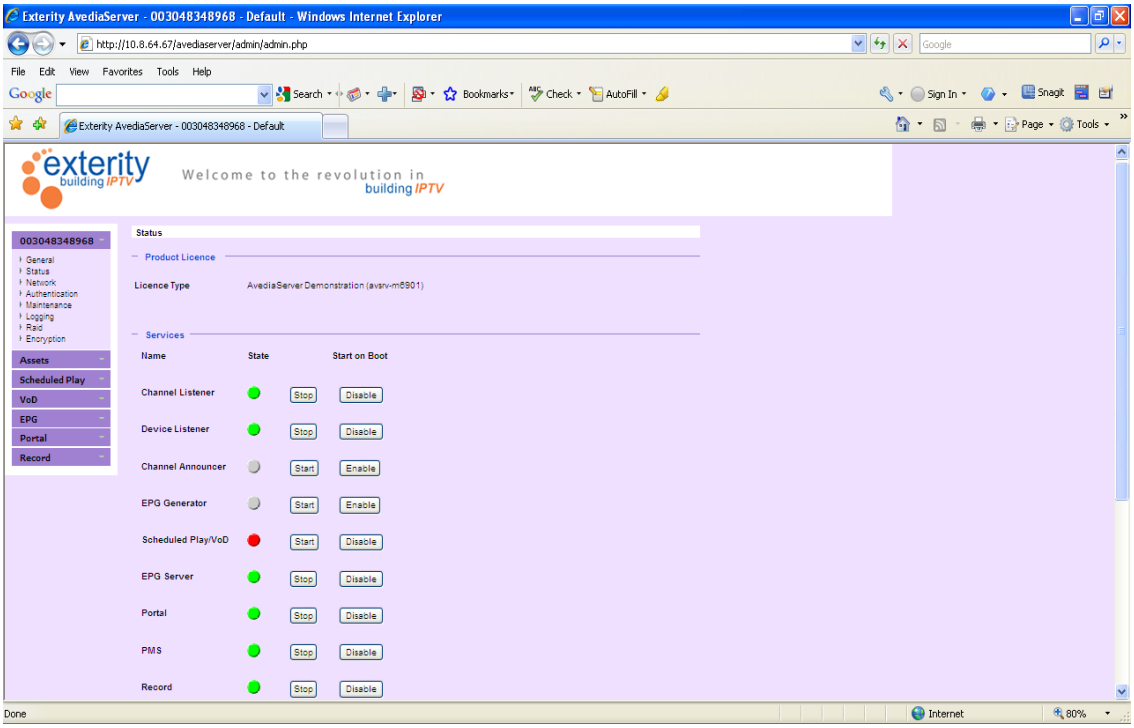


Figure 2 AvediaServer Web Management Interface

3. Click on the server name to display the menu; this is the top tab in the purple bar on the left-hand side. By default, the name is displayed as the MAC address of the server. Use this menu to navigate through the tabs, configuring settings, as required.

4. Click **Apply** on each tab to save your changes

Admin Interface

In certain circumstances it may not be possible to manage the AvediaServer via the Web Management Interface.

For these situations, a text-based Admin Interface is provided, which is available via the serial and ssh interfaces.

For more information, see **APPENDIX A Serial Interface Connection** on page **33**.

To log into the Admin Interface:

1. Log into the Admin Interface using the following login details:

   Username: `serveradmin`

   Password: `labrador`

2. Run the following command to get the IP address of the AvediaServer:

   ```
   ifconfig
   ```

4 Configuring the AvediaServer

This section of the manual describes how to manage the AvediaServer using the Web Management Interface. All procedures described in this section assume that you are running the Web Management Interface, as described in Management Interfaces on page 12.

Note: When making changes using the Web Management Interface, click **Apply** to save your changes on each tab before moving to another tab, otherwise your changes will be lost.

Naming the AvediaServer

The AvediaServer can be assigned a name and location. This name can be used to identify the AvediaServer within the IPTV Manager, while the location you specify is used by the IPTV Manager to organise device into folders. For example, if you specify **Foyer**, the AvediaServer appears in **`Location\Foyer`** in the IPTV Manager.

Note: The default name assigned to the AvediaServer is the MAC address.

To specify the name and location:

1. Open the Web Management Interface
2. Click on the **General** page

   The **General** page is displayed, as shown below:

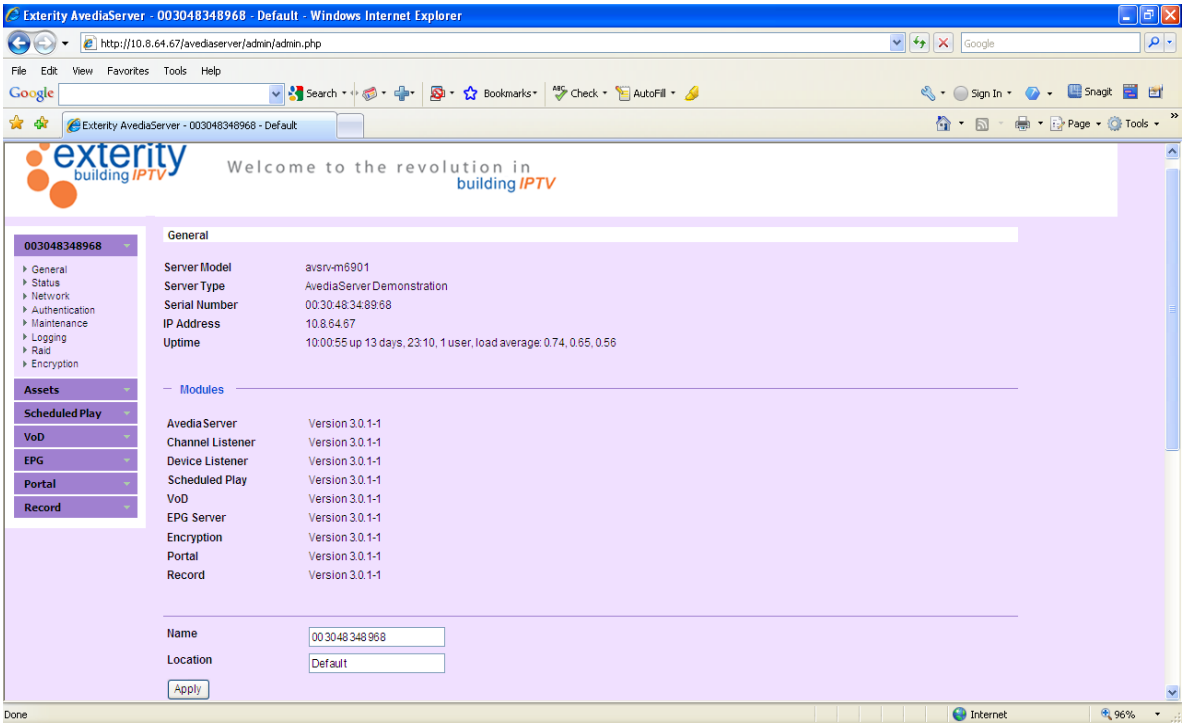


Figure 3 AvediaServer General Page

3. Enter the name you wish to assign to the AvediaServer in the **Name** field
4. Enter the location name you wish to assign to the AvediaServer in the **Location** field
5. Click **Apply**

Note: The name and location can also be configured using the **Properties** page in IPTV Manager.

Changing the Admin Password

By default, a username/password pair of `admin`/`labrador` is required to gain access to the Web Management Interface and the Admin Interface. The admin password can be changed by the administrator, as required.

To change the admin password:

1. Open the Web Management Interface
2. Click on the **Authentication** tab

   The **Authentication** page is displayed, as shown below:

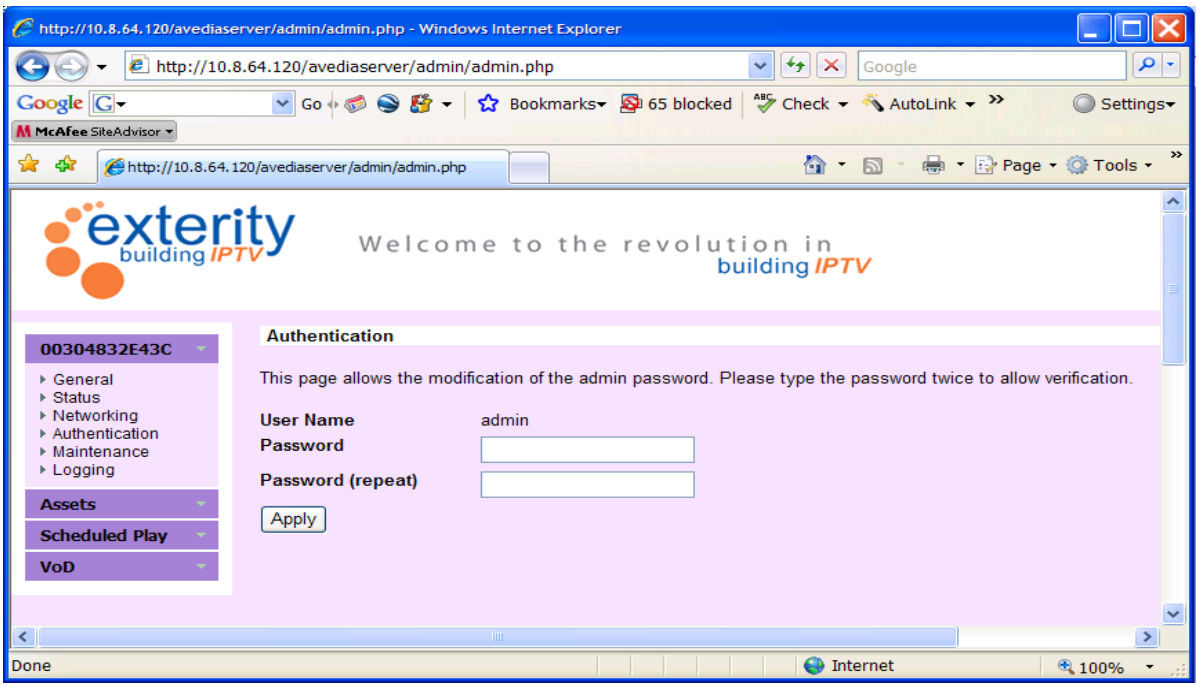


Figure 4 AvediaServer Authentication Page

3. Enter the desired password in both **Password** fields
4. Click **Apply**

Configuring Network Settings

Configuring IP address settings

You can configure the server to obtain an IP address automatically using DHCP, or you can specify static addressing information, such as IP address, subnet mask and default gateway.

Note: Changes to IP addressing take place immediately on clicking **Apply**.

By default, the AvediaServer is configured to assign an IP address using DHCP, as shown below:

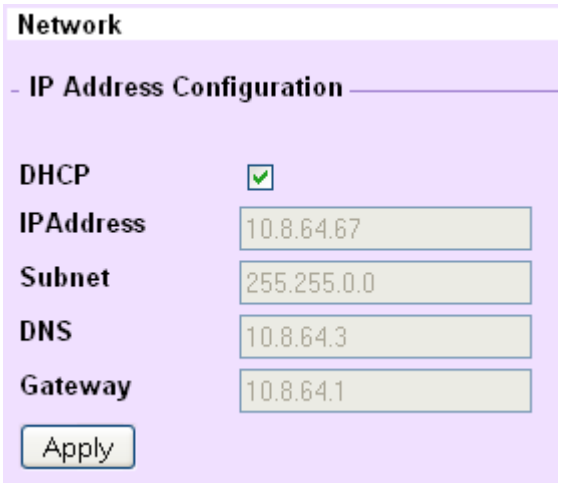


Figure 5 AvediaServer IP Address Configuration

To configure a static IP address:

1. Open the Web Management Interface
2. Click on the **Network** tab

The **Network** page is displayed:

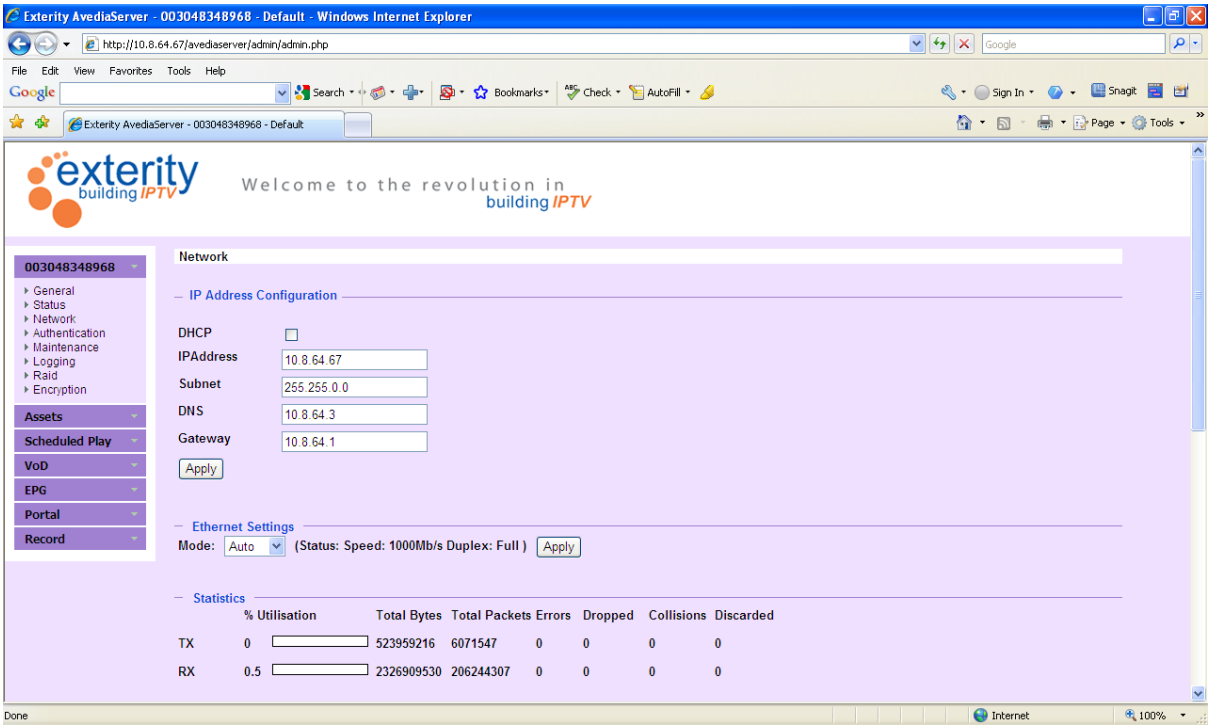


Figure 6 AvediaServer Network Page

3. In the **IP Address Configuration** section, deselect the **DHCP** checkbox
4. Enter the IP Address you wish to assign to the AvediaServer in the **IPAddress** field
5. Enter the Subnet mask you wish to assign to the AvediaServer in the **Subnet** field
6. Enter the DNS address you wish to assign to the AvediaServer in the **DNS** field
7. Enter the Gateway address you wish to assign to the AvediaServer in the **Gateway** field
8. Click **Apply**

To configure the AvediaServer to be allocated an IP address dynamically:

1. Click on the **Network** tab

   The **Network** page is displayed, as shown in **Figure 6**
2. In the **IP Address Configuration** section, select the **DHCP** checkbox
3. Click **Apply**

Note: Consult the IPTV Manager to obtain the DHCP address of the AvediaServer

Configuring the Ethernet Settings

The AvediaServer's Ethernet interface is a 100/1000 port that can be set to either auto-negotiation or 100FD mode. Auto-negotiation is enabled by default.

Note: In order to avoid Ethernet errors, ensure that the server's interface settings match the settings for the network switch port to which the server is connected. This means that either both devices should be configured for auto-negotiation or both devices should be configured for a fixed setting of 100FD.

You can view the **Ethernet Settings** on the **Network** tab, as shown below:

Figure 7 AvediaServer Ethernet Settings

To enable/disable auto-negotiation:

1. Click on the **Network** tab
2. Choose an option from the **Auto-negotiation** box
3. Click **Apply**

Note: Exterity strongly recommends that you leave the Ethernet Settings on 'Auto' Mode at all times.

5 Status Monitoring

This section explains how to check the operating status of the AvediaServer.

Viewing AvediaServer Details

To view AvediaServer details:

1. Open the Web Management Interface
2. Click on the **General** tab

   The **General** page is displayed, as shown below:

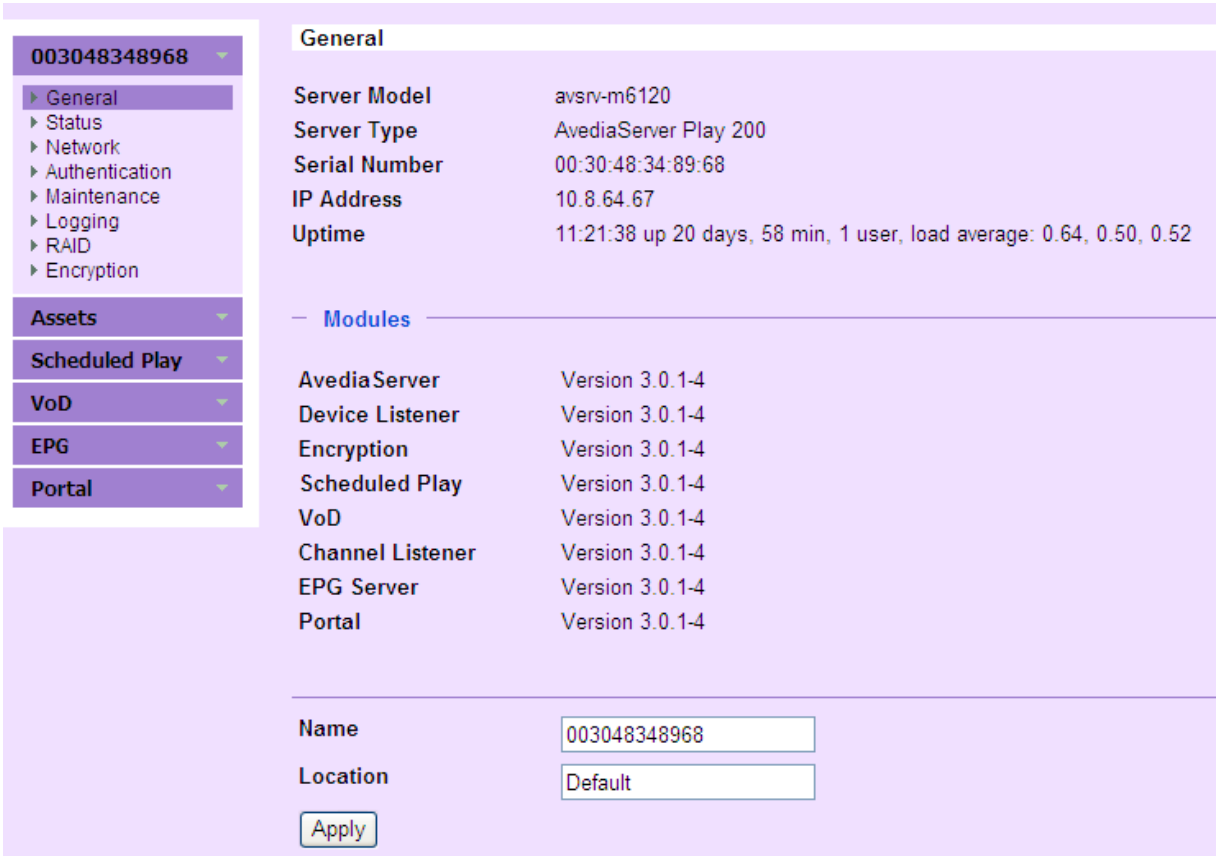


Figure 8 AvediaServer General Page

The following information is displayed on the **General** page:

Server Model

The AvediaServer model, which is the AvediaServer code and model number. In **Figure 8**, this is **avsrv** and **m6120** respectively.

For more information, see **Table 3 AvediaServer Model Configurations** on page **9**.

Server Type

The AvediaServer type. In **Figure 8**, this is **Play 200**.

For more information, see **Table 3 AvediaServer Model Configurations** on page **9**.

Serial Number

The MAC address of the device.

IP Address

The IP address assigned to the AvediaServer, either configured statically or assigned by DHCP.

Uptime

The length of time since the last power-on or reboot.

Modules

The version number of the AvediaServer and all available modules.

Name

Name of the AvediaServer

Location

Location of the AvediaServer

Note: You can also view service package version details on the **Maintenance** page.

Viewing Service Status

The modules available with your AvediaServer specify which services are available. Each module supplies one or more services.

To view the status of the services:

1. Open the Web Management Interface

   The **Status** page is displayed, as shown below:

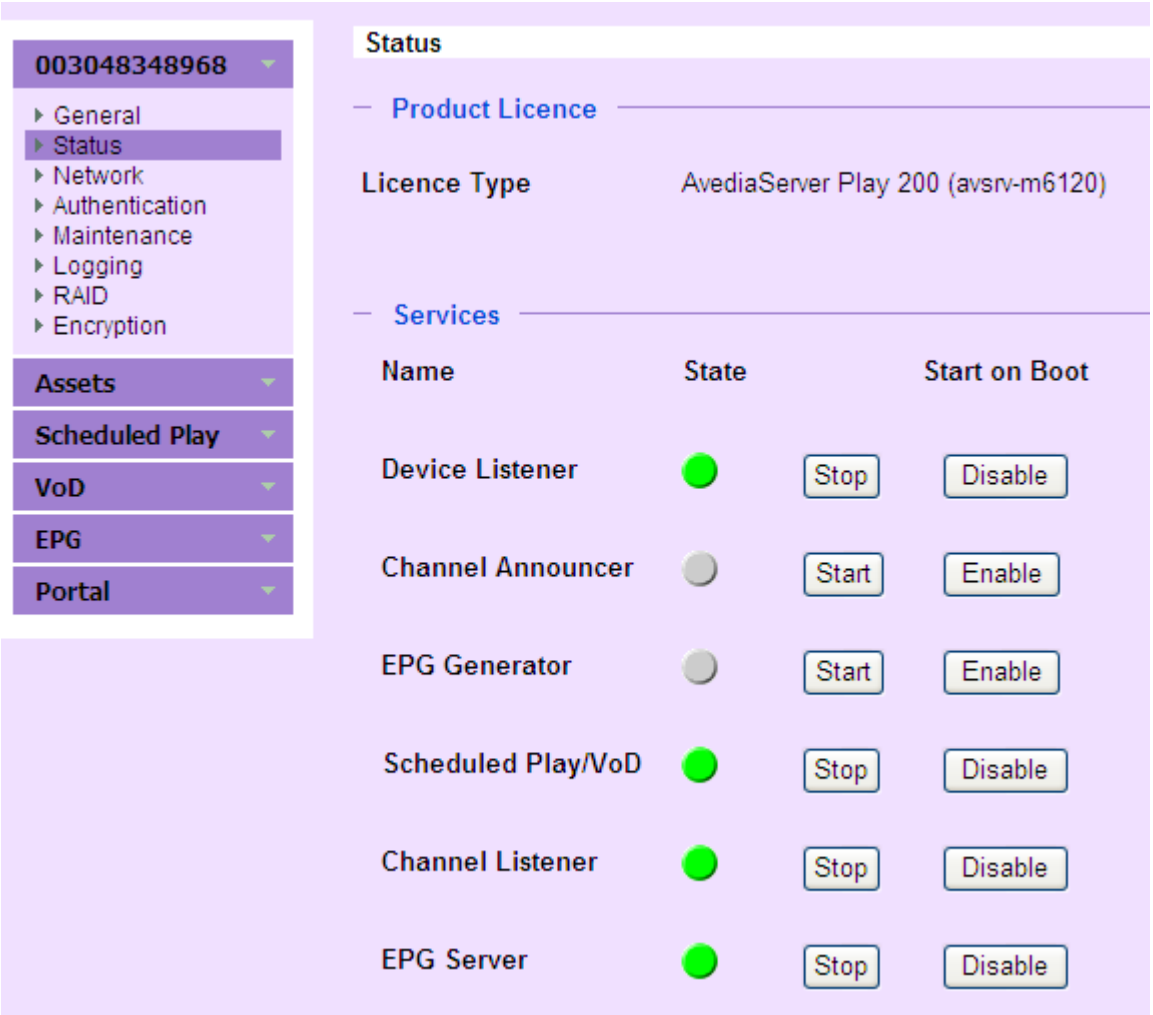


Figure 9 AvediaServer Status Page

The **Licence Type** and status of all available services are displayed.

AvediaServer services status is shown by a simple traffic light icon that has 3 states:

- **Green** - indicates that the service is running without any error.
- **Red** - indicates that the service is not running. The administrator has deliberately stopped the service or an error has occurred.
- **Grey** - indicates that start on boot is disabled and the service is not running.

Viewing Hardware Information

To view hardware information for the AvediaServer:

1. Open the Web Management Interface

2. Click on the **Maintenance** tab

   The **Maintenance** page is displayed, as shown in **Figure 12**

3. In the Server Details section, click the **Show** button alongside **Hardware Info**

   A page showing all the hardware information is displayed, as shown partially below:

```
#### Network Interface Configuration ####
eth0      Link encap:Ethernet  HWaddr 00:30:48:34:89:68
          inet addr:10.8.64.67  Bcast:10.8.255.255  Mask:255.255.0.0
          inet6 addr: fe80::230:48ff:fe34:8968/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:236876907 errors:0 dropped:0 overruns:0 frame:0
          TX packets:3295673 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:3625030121 (3.3 GB)  TX bytes:835777453 (797.0 MB)
          Base address:0x2000 Memory:d8000000-d8020000

eth1      Link encap:Ethernet  HWaddr 00:30:48:34:89:69
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
```

Figure 10 AvediaServer Hardware Information

Starting and Stopping Services

To start a service:

4. Open the Web Management Interface

   The **Status** page is displayed, as shown in **Figure 9**

5. Click on the **Start** button next to the service you wish to start

   The service will start and the **Status** will turn to **green**.

To stop a service:

1. Open the Web Management Interface

   The **Status** page is displayed, as shown in **Figure 9**

2. Click on the **Stop** button next to the service you wish to stop

   The service will stop and the **Status** will turn to **red** if Start on Boot is enabled or **grey** if Start on Boot is disabled.

Configuring Services to Start on Boot

You can configure services to start automatically when you boot up the AvediaServer. You can also disable services from starting on boot.

To enable a service to start on boot:

1. Open the Web Management Interface

   The **Status** page is displayed, as shown in **Figure 9**

2. Click on the **Enable** button next to the service you wish to start automatically on boot. This will toggle to Disable.

   The service will start automatically the next time you boot the AvediaServer.

To disable a service from starting on boot:

1. Open the Web Management Interface

   The **Status** page is displayed, as shown in **Figure 9**

2. Click on the **Disable** button next to the service you wish to disable on boot. This will toggle to Enable.

   The service will be disabled the next time you boot the AvediaServer.

Viewing Network Status

The **Statistics** section of the **Network** page provides an indication of the bandwidth being used by the network interface.

To view network status:

1. Open the Web Management Interface
2. Click on the **Network** tab

   The **Network** page is displayed, as shown in **Figure 6**

   The Ethernet interface statistics are shown at the bottom of the page. The AvediaServer automatically updates the statistics without the need to refresh the page.

Note: With reference to the **Play** module only, the information in the **Statistics** section is useful if the AvediaServer is indicating that it is streaming channels but that the channels are not accessible. If the channels are streaming, the bandwidth being used by the network will indicate this; a TV channel typically uses 4Mbps of network bandwidth and a radio channel uses approximately 200Kbps.

For more information about the **Play** module, see the *AvediaServer Play Module Administrator's Guide V3.0.1*.

Viewing RAID Status

The AvediaServer may be installed with multiple disks configured in a RAID array, which ensures that no data is lost in the event of a disk failing.

Note: RAID is only applicable to the AvediaServer **Play** and **Record** modules.

To check the status of the RAID array on the AvediaServer:

1. Open the Web Management Interface
2. Click on the **RAID** tab

   The **RAID** page is shown below:

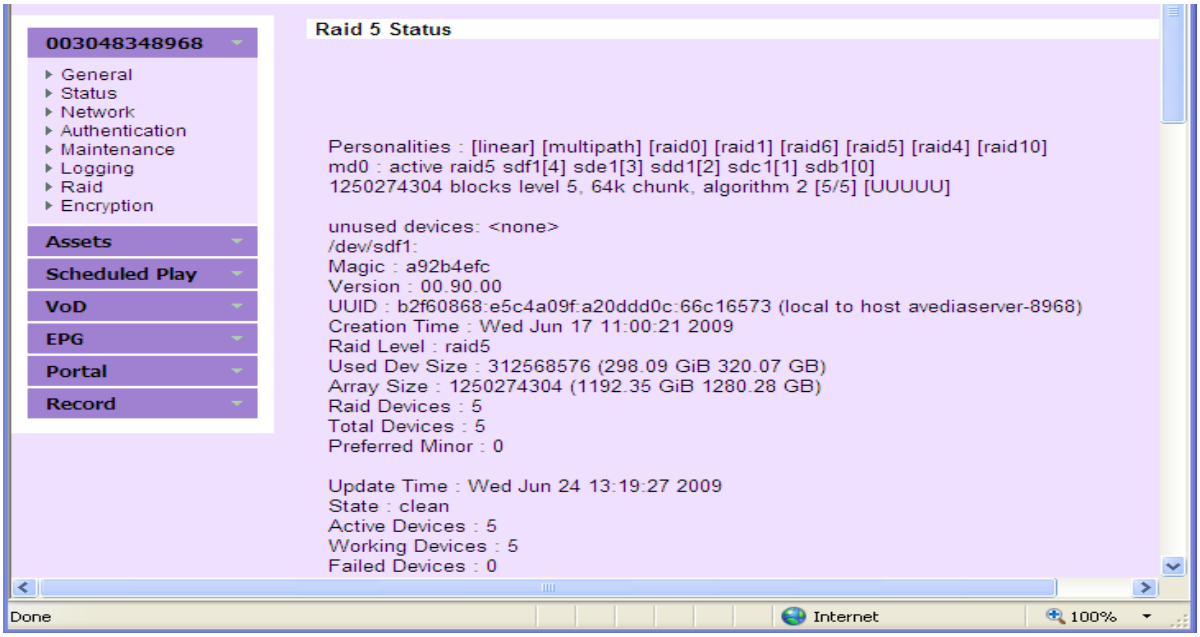


Figure 11 AvediaServer RAID page

3. Check that the last characters in the third line of output look like [UUUUU], as shown below:

   ```
   Personalities : [linear] [multipath] [raid0] [raid1] [raid6] [raid5] [raid4] [raid10]
   md0 : active raid5 sdf1[4] sde1[3] sdd1[2] sdc1[1] sdb1[0]
   1250274304 blocks level 5, 64k chunk, algorithm 2 [5/5] [UUUUU]
   ```

   Each 'U' relates to an individual disk in the RAID array. In the above example, there are five disks in the array.

   If you see an underscore (for example, [_UUUU]), one of the disks is faulty and has been removed from the RAID array.

4. Further down the page, check the number of RAID Devices. If all the disks are working properly, the output should look like this:

   ```
   Raid Devices : 5
   Total Devices : 5
   ```

   If the number of Total Devices is less than the number of RAID Devices (for example, Total Devices = 4 and RAID Devices = 5), a disk(s) in the array is faulty and has been removed from the RAID array.

Disks missing from the RAID array

A disk could be missing from the array because it has physically been removed from the server or it could be logically removed from the array because of some other problem (for example, read/write errors resulting in the RAID software deciding not to use the disk and removing it from the RAID array).

If you discover there is a disk missing, please contact support for assistance. For more information, see **APPENDIX C Support and Contact Information** on page **36**.

6 Maintaining the AvediaServer

Upgrading the AvediaServer

Upgrading an Exterity AvediaServer to the 3.0.1 release is a complex process that involves a complete installation of the operating system.

For more information, contact your System integrator.

Exporting Configurations to a TFTP Server

Once the upgrade is complete, a configuration can be exported from the AvediaServer to a TFTP server.

To export a configuration from the AvediaServer:

1. Open the Web Management Interface
2. Click on the **Maintenance** tab

   The **Maintenance** page is displayed, as shown below:

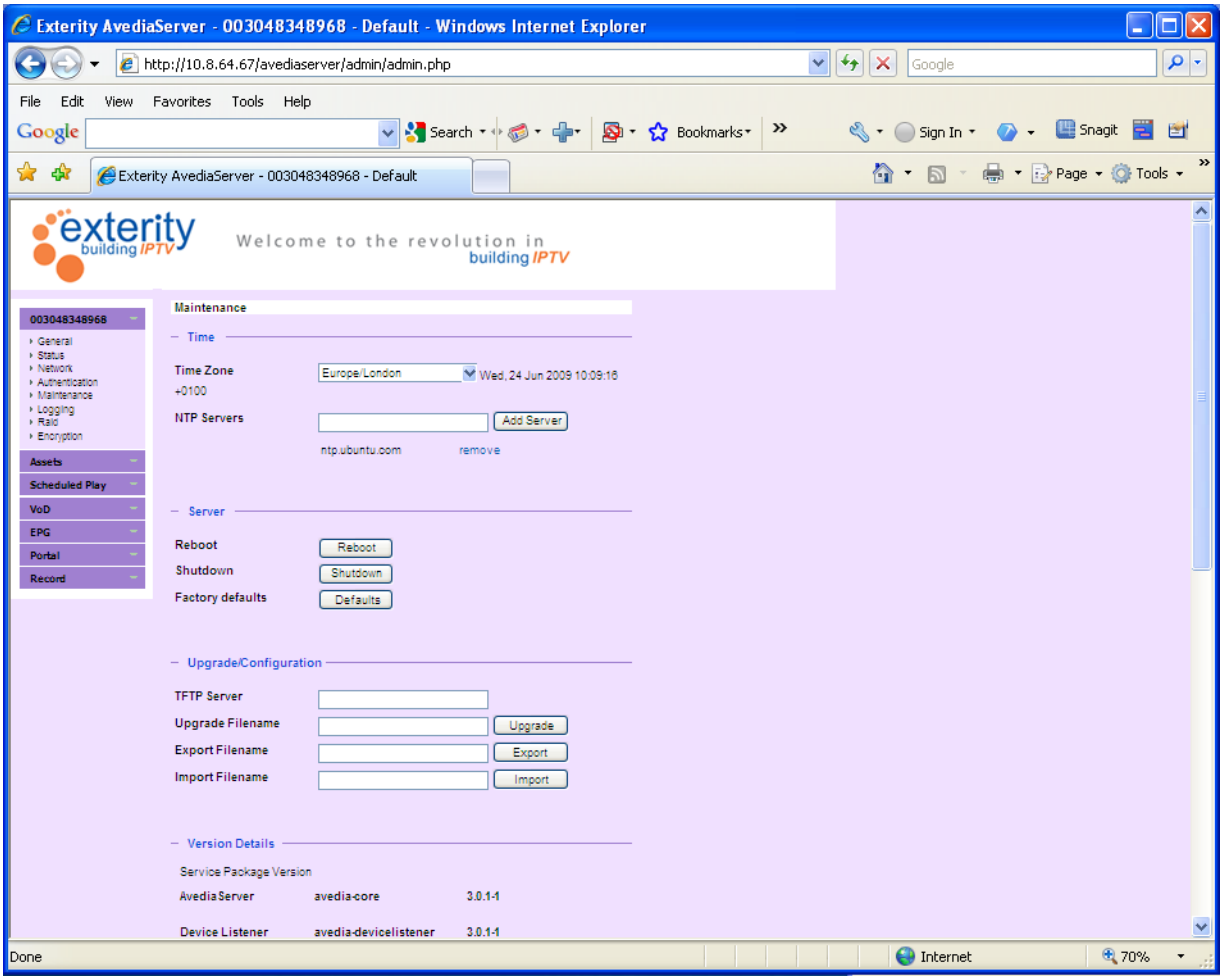


Figure 12 AvediaServer Maintenance Page

3. In the **Upgrade/Configuration** section, enter the IP address of the TFTP server in the **TFTP Server** field
4. Enter the filename of the configuration to export in the **Export Filename** field
5. Click **Export**

Importing Configurations from a TFTP Server

Once the upgrade is complete, any exported configuration can be imported from a TFTP server into the AvediaServer.

To import a configuration into the AvediaServer:

1. Copy the exported configuration to the `root` directory of the TFTP server
2. Open the Web Management Interface
3. Click on the **Maintenance** tab

   The **Maintenance** page is displayed, as shown in **Figure 12**
4. In the **Upgrade/Configuration** section, enter the IP address of the TFTP server in the **TFTP Server** field
5. Enter the filename of the configuration to import in the **Import Filename** field
6. Click **Import**
7. View the log file to verify that the configuration settings have been uploaded

Configuring the NTP Server

You can configure an NTP Time Server on the Maintenance page. The AvediaServer uses this to keep time accurately and adjusts its time accordingly.

Note: When DHCP is used, NTP servers configured using the Web Management Interface are ignored; only NTP servers supplied by the DHCP server will be used.

To add an NTP server:

1. Open the Web Management Interface
2. Click on the **Maintenance** tab

   The **Maintenance** page is displayed, as shown in **Figure 12**
3. In the **Maintenance** section, enter the name of the NTP server in the **NTP Servers** field
4. Click **Add Server**

To remove an NTP server:

5. Open the Web Management Interface
6. Click on the **Maintenance** tab

   The **Maintenance** page is displayed, as shown in **Figure 12**
7. In the **Maintenance** section, click remove

Configuring the Local Time of the AvediaServer

The AvediaServer has a real-time clock that is persistent over reboots and power downs.

The actual local time is very important when AvediaServer is running or recording Scheduled Play.

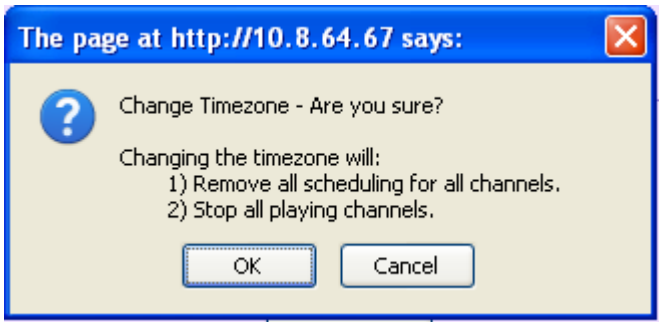
Note: Changing the **Time Zone** will clear any scheduled content configured in the **Scheduled Play** channels. Therefore, ensure that you configure the **Time Zone** before scheduling any content.

To configure the local time of the AvediaServer:

1. Open the Web Management Interface
2. Click on the **Maintenance** tab

   The **Maintenance** page is displayed, as shown in **Figure 12**
3. Select the country and region from the **Time Zone** drop-down list

A warning message is displayed, as shown below:


The page at http://10.8.64.67 says:
Change Timezone - Are you sure?
Changing the timezone will:
1) Remove all scheduling for all channels.
2) Stop all playing channels.
OK
Cancel

4. Click **OK**

Rebooting the AvediaServer

To reboot the AvediaServer:

1. Open the Web Management Interface
2. Click on the **Maintenance** tab

   The **Maintenance** page is displayed, as shown in **Figure 12**
3. In the **Server** section, click **Reboot**

Shutting Down the AvediaServer

To shut down the AvediaServer:

1. Open the Web Management Interface
2. Click on the **Maintenance** tab

   The **Maintenance** page is displayed, as shown in **Figure 12**
3. In the **Server** section, click **Shutdown**

Returning the AvediaServer to Factory Default Settings

To return the AvediaServer to the factory default settings:

1. Open the Web Management Interface
2. Click on the **Maintenance** tab

The **Maintenance** page is displayed, as shown in **Figure 12**

3. In the **Server** section, click **Factory defaults**

7 Logging

Logging permanently logs events. Logging information can be used by authorised Exterity service personnel to analyse any installation or performance problems experienced on an AvediaServer.

Logging Information to an External Syslog Server

The AvediaServer is configured by default to record events locally (Level = 7-Debug). However, you can configure the AvediaServer to log information to an external Syslog server.

Note: There needs to be a Syslog server already available on a network

To log information to an external Syslog server:

1. Open the Web Management Interface
2. Click on the **Logging** tab

The **Logging** page is displayed, as shown below:

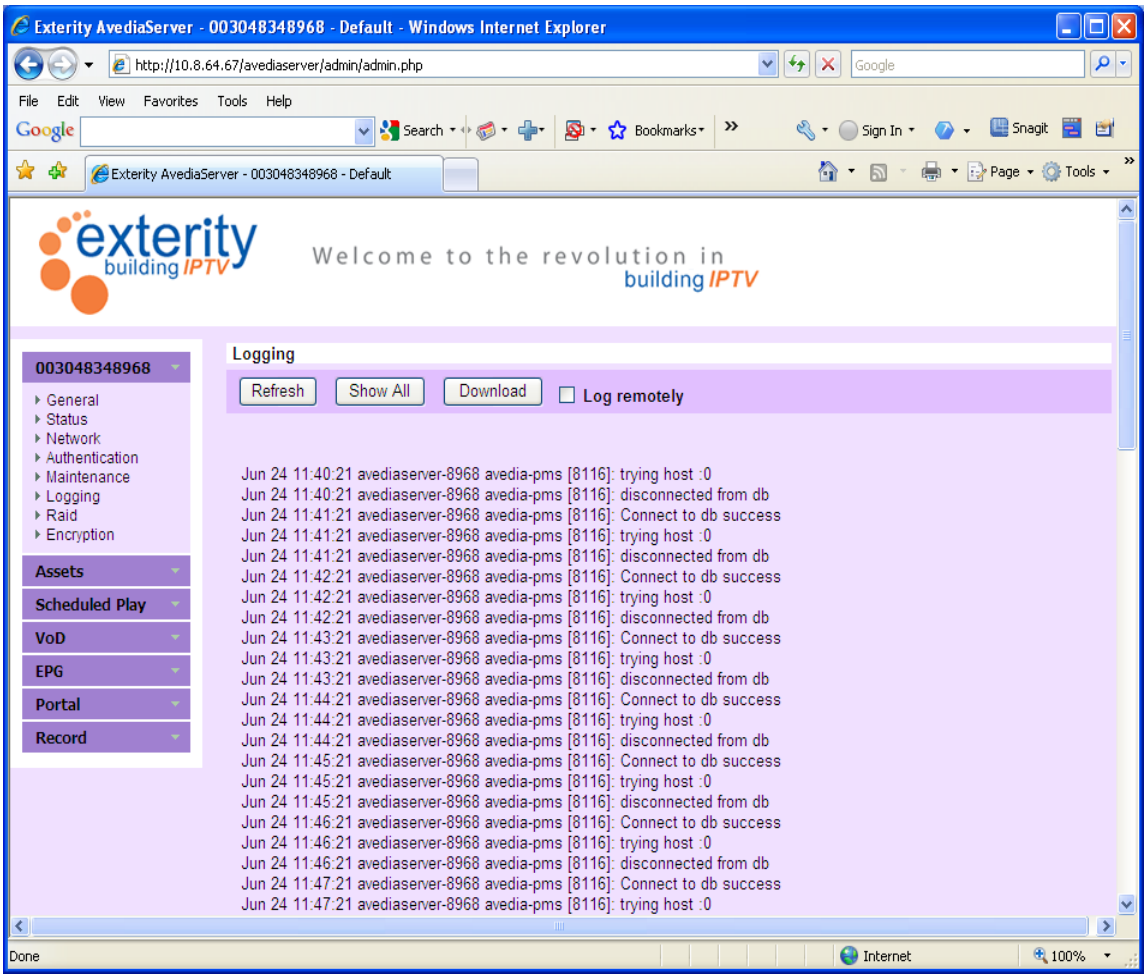

Exterity AvediaServer - 003048348968 - Default - Windows Internet Explorer
http://10.8.64.67/avediaserver/admin/admin.php
File Edit View Favorites Tools Help
Exterity AvediaServer - 003048348968 - Default
exterity building IPTV
Welcome to the revolution in building IPTV
003048348968
General
Status
Network
Authentication
Maintenance
Logging
Raid
Encryption
Assets
Scheduled Play
VoD
EPG
Portal
Record
Logging
Refresh
Show All
Download
Log remotely
Jun 24 11:40:21 avediaserver-8968 avedia-pms [8116]: trying host :0
Jun 24 11:40:21 avediaserver-8968 avedia-pms [8116]: disconnected from db
Jun 24 11:41:21 avediaserver-8968 avedia-pms [8116]: Connect to db success
Jun 24 11:41:21 avediaserver-8968 avedia-pms [8116]: trying host :0
Jun 24 11:41:21 avediaserver-8968 avedia-pms [8116]: disconnected from db
Jun 24 11:42:21 avediaserver-8968 avedia-pms [8116]: Connect to db success
Jun 24 11:42:21 avediaserver-8968 avedia-pms [8116]: trying host :0
Jun 24 11:42:21 avediaserver-8968 avedia-pms [8116]: disconnected from db
Jun 24 11:43:21 avediaserver-8968 avedia-pms [8116]: Connect to db success
Jun 24 11:43:21 avediaserver-8968 avedia-pms [8116]: trying host :0
Jun 24 11:43:21 avediaserver-8968 avedia-pms [8116]: disconnected from db
Jun 24 11:44:21 avediaserver-8968 avedia-pms [8116]: Connect to db success
Jun 24 11:44:21 avediaserver-8968 avedia-pms [8116]: trying host :0
Jun 24 11:44:21 avediaserver-8968 avedia-pms [8116]: disconnected from db
Jun 24 11:45:21 avediaserver-8968 avedia-pms [8116]: Connect to db success
Jun 24 11:45:21 avediaserver-8968 avedia-pms [8116]: trying host :0
Jun 24 11:45:21 avediaserver-8968 avedia-pms [8116]: disconnected from db
Jun 24 11:46:21 avediaserver-8968 avedia-pms [8116]: Connect to db success
Jun 24 11:46:21 avediaserver-8968 avedia-pms [8116]: trying host :0
Jun 24 11:46:21 avediaserver-8968 avedia-pms [8116]: disconnected from db
Jun 24 11:47:21 avediaserver-8968 avedia-pms [8116]: Connect to db success
Jun 24 11:47:21 avediaserver-8968 avedia-pms [8116]: trying host :0
Done
Internet
100%

Figure 13 AvediaServer Log Page

3. Click the **Log remotely** checkbox

The following toolbar is displayed, which allows you to configure the **Syslog Server** and the **Logging Level**.

Figure 14 AvediaServer Logging Toolbar

4. Enter the IP address of the Syslog Server in the **Syslog Server** field
5. Increase the logging level from the **Level** drop-down list configures the amount of logging information sent to the Syslog server
6. Click **Update**

Downloading the Log File

To download the log file:

1. Open the Web Management Interface
2. Click on the **Logging** tab

   The **Logging** page is displayed, as shown in **Figure 13**
3. Click the **Download** button

   The following pop-up window is displayed:

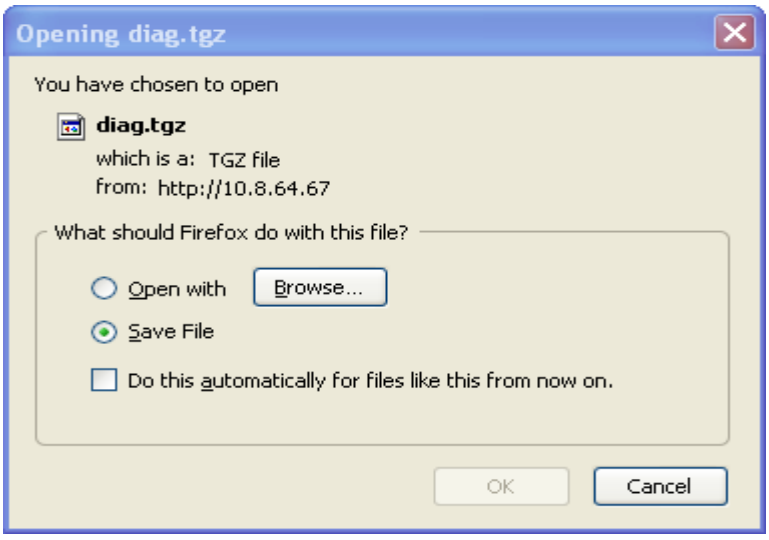


Figure 15 AvediaServer Save Log File

4. Save the log file to the required destination.

Note: You can also open the log file if you wish to view it immediately.

Viewing all Logging Information

To view all logging information:

1. Open the Web Management Interface
2. Click on the **Logging** tab

   The **Logging** page is displayed, as shown in **Figure 13**
3. Click the **Show All** button

   The following window is displayed with all available log information:

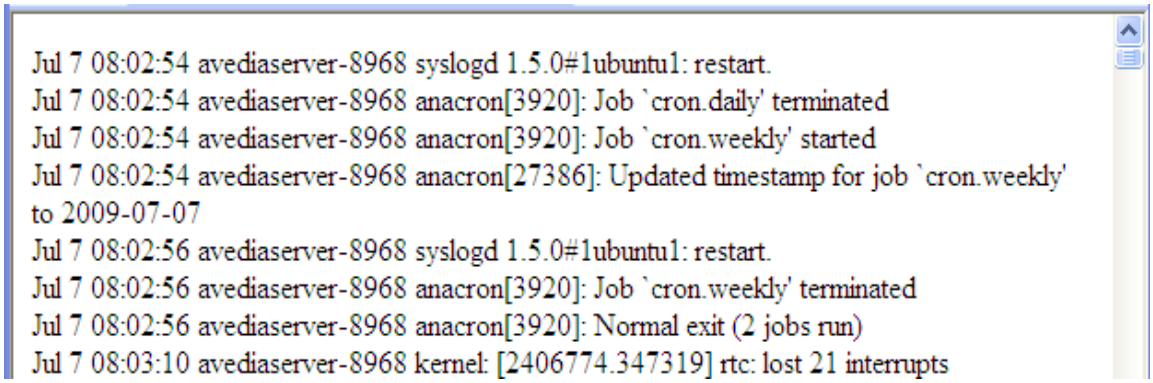

Jul 7 08:02:54 avediaserver-8968 syslogd 1.5.0#1ubuntu1: restart.
Jul 7 08:02:54 avediaserver-8968 anacron[3920]: Job `cron.daily' terminated
Jul 7 08:02:54 avediaserver-8968 anacron[3920]: Job `cron.weekly' started
Jul 7 08:02:54 avediaserver-8968 anacron[27386]: Updated timestamp for job `cron.weekly' to 2009-07-07
Jul 7 08:02:56 avediaserver-8968 syslogd 1.5.0#1ubuntu1: restart.
Jul 7 08:02:56 avediaserver-8968 anacron[3920]: Job `cron.weekly' terminated
Jul 7 08:02:56 avediaserver-8968 anacron[3920]: Normal exit (2 jobs run)
Jul 7 08:03:10 avediaserver-8968 kernel: [2406774.347319] rtc: lost 21 interrupts

Figure 16 Show All Log Information

Refreshing Logging Information

To refresh the Logging page:

1. Open the Web Management Interface
2. Click on the **Logging** tab

The **Logging** page is displayed, as shown in **Figure 13**

3. Click the **Refresh** button

   The logging information is refreshed.

8 Troubleshooting

Problem	Possible Cause	Solution
AvediaServer does not appear in IPTV Manager	Network connection faulty	Check Ethernet connections or replace cable
	DHCP not running	Unless you are using a static IP address, check that DHCP server is running on network
	PC has firewall configured, blocking SNMP traps	Disable firewall, or open UDP port 162
	PC has another application listening for SNMP traps	Close down SNMP trap listener
IPTV Manager cannot communicate with AvediaServer	Network connection faulty	See above
	Device has an IP address on a different subnet to the management station	Use a management station configured with an appropriate IP address to manage the device
No services are displayed on the **Status** page	No dongle inserted into chassis	Insert the dongle into chassis
Unable to insert dongle into chassis	Problem with dongle	Contact Technical Support. Please have the product name and order code on hand – the licence type of the dongle shows this information.
Inserted/reinserted dongle into chassis but no services are showing		
All services have stopped	Dongle has been removed	Reinsert the dongle into chassis
Cannot connect to URL to view AvediaServer web pages	You are using invalid proxy settings	Check your proxy settings on **Browser** tab
Faulty disk in the RAID array on the AvediaServer	Unknown	Contact your Exterity systems integrator or reseller. **Warning!** Removing disks from the RAID array may crash the AvediaServer.

APPENDIX A Serial Interface Connection

The serial admin interface provides the ability to manage a small subset of device functionality e.g. to configure an IP address.

Cabling

A 'null modem' or 'crossover' 9 pin serial cable is required for connection to a PC. The server has standard DB-9 male connector.

Opening a Session

Open a terminal program such as Hyperterminal (this can be found on a standard Windows PC).

Set up the serial port with the following settings (see example in Figure 15 Serial port settings):

- Baud rate: 115200
- Data bits: 8
- Parity: none
- Stop bits: one
- Flow control: none

Note: There are two serial ports on the server and the one at the back should be used.

The program should now connect and present a login prompt if the return key is pressed.

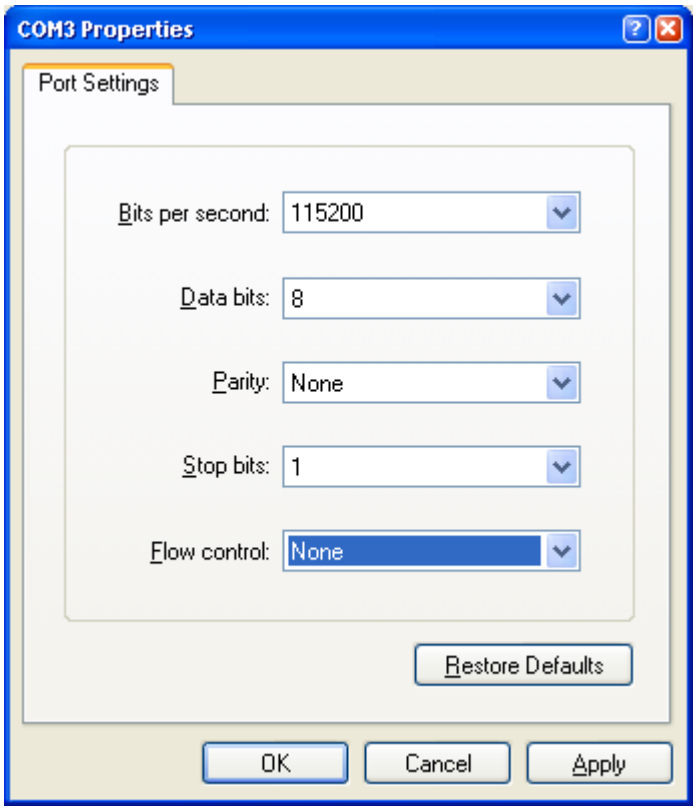


Figure 15 Serial port settings

APPENDIX B Discovering the IP Address of the AvediaServer

By default and as shipped from the factory the AvediaServer will get its IP address from the DHCP server on the network.

There are four methods to find out the IP address assigned via DHCP:

1. Check the leased IP address database of the DHCP server. Match the MAC address of the AvediaServer to an allocated IP address.
2. Run the IPTV Manager and get the IP address of the AvediaServer from the device properties.
3. Log into the Admin Interface via the serial interface using username=`serveradmin` and password=`labrador` and run the `ifconfig` command to get the IP address of the AvediaServer.

   For more information, see **APPENDIX A Serial Interface Connection** on page **33**.
4. Use a network snooper application, such as Wireshark, to listen for the broadcast traps (255.255.255.255, port 162).

APPENDIX C Support and Contact Information

Technical Support for Exterity products is provided by authorised Systems Integrators and Resellers.

Please contact your Systems Integrator or Reseller with any Support issues.